

Listing of Claims:

1. (Currently Amended) ~~Method~~ A method for tightening a screw joint to a desired target torque level ~~by means of using~~ an impulse wrench having an impulse unit with a motor driven inertia drive member, and a programmable control unit arranged to control
5 the a power supply to the impulse wrench, ~~according to the following steps said method comprising:~~

starting a screw joint tightening process at a reduced power supply to the impulse wrench,

ascertaining ~~the~~ an angular displacement and a retardation
10 magnitude of the inertia drive member during each delivered impulse,

calculating ~~the~~ an instantaneous torque magnitude and a torque growth during a number of delivered impulses,

increasing after ~~the~~ a very first delivered impulse the
15 power supply to the impulse wrench in response to the calculated torque growth,

reducing the power supply to the impulse wrench in response to the instantaneous torque magnitude and to the calculated torque growth during each impulse ~~after~~ as the instantaneous
20 torque magnitude ~~has reached~~ reaches a predetermined ~~part~~ percentage of the desired target torque level, and

interrupting the power supply to the impulse wrench as the target torque level ~~has been~~ is reached.

2. (Currently Amended) ~~Method~~ The method according to claim 1, wherein the power supply is increased after the very first delivered impulse to an optimum magnitude determined by the calculated ~~relative~~ torque growth and ~~the~~ an installed torque magnitude during the very first delivered impulse in relation to the target torque level.

3. (Currently Amended) ~~Power~~ A power wrench system for tightening a screw joint to a desired target torque level, comprising:

a torque impulse wrench,
a programmable control unit, and
a power supply connected to the impulse wrench and governed by the control unit,

wherein the impulse wrench comprises an impulse unit with a motor driven inertia drive member, and an angle sensor connected to said inertia drive member to detect ~~the~~ an angular movement of said inertia drive member, and

wherein:

said power supply is controlled to supply the impulse wrench with a reduced power until ~~the~~ a very first impulse is delivered to the screw joint ~~being worked,~~

said control unit is arranged to receive signals from the angle sensor and to determine ~~the~~ an angular displacement and

the a retardation magnitude of the inertia drive member during
each delivered impulse, and to calculate the a delivered torque
20 as well as the a torque growth per angle increment during each
impulse, and

said control unit is arranged to increase the power
supply to the impulse wrench after the very first impulse has
been delivered, to reduce the power supply to the impulse wrench
25 as the an instantaneous torque magnitude ~~has reached~~ reaches a
predetermined ~~part~~ percentage of the target torque level, and to
interrupt the power supply to the impulse wrench as the target
torque level ~~has been~~ is reached.

4. (Currently Amended) ~~Power~~ The power wrench system
according to claim 3, wherein the impulse wrench is pneumatically
powered, and said power supply comprises a valve connected to the
control unit and arranged to vary the a pressure air supply to
5 the impulse wrench between zero and a full power flow as
determined by the control unit.

Claim 5 (Canceled).